American Heart Association.

Scientific Sessions DAILY NEWS

SUNDAY
NOV. 6, 2022

Inside

Science, medicine must be a 'relentless force' in fighting misinformation

The recent past can provide a light toward the future of public health and science education.

The past several years have seen major disasters around the world, not the least of which is the COVID-19 pandemic. But we have also witnessed a strong scientific response to those disasters. Unfortunately, getting that science out into the public domain has been an uphill battle against a rising tide of misinformation.

Michelle A. Albert, MD, MPH, FAHA, president of the American Heart Association, kicked off Saturday's Opening Session by saying that battle is at the core of the mission

See **OPENING SESSION**, page 6

Adams

Califf

Benjamin

Pinto

Creating a diverse medical community requires going to its roots

Increasing inclusivity at the educational level will lead to a broader spectrum of voices within the medical community.

If you want a diverse medical staff, you've got to have diversity in the schools that educate that staff.

In Saturday's session, "Global Innovations to Transform the Medical Workforce: Addressing Unmet Cardiovascular and Other Health Needs," Michelle Albert, MD, MPH, FAHA, president of the American Heart Association, said cardiologists must focus on the issue.

"Medical education is one of those areas that we as cardiologists don't pay enough attention to," she said. "And we need to."

Dr. Albert said the struggle goes across all systems in the medical field.

"All of our systems are struggling with increasing diversity in medical school, in residency, fellowship and especially in faculty," she said. "We know that in cardiovascular medicine, only about 3% of the faculty are Black (educators) and about 5% are Hispanic, so we obviously have a problem."

Paula Johnson, MD, MPH, president of Wellesley College, said one of the keys to increasing diversity

See **INCLUSIVITY**, page 10

See page 10 for Learning Studios and Roundtables schedule. ▶

Today at Sessions

LATE-BREAKING SCIENCE

LBS.03. High Impact Trials in Intervention and Surgery
8-9 a.m. | Main Event I

- Radial Artery Patency and Clinical Outcomes (*RAPCO*) Randomized Trials—The 15-Year Clinical Outcomes Comparing Radial Artery With Right Internal Thoracic Artery or With Saphenous Vein Grafting (*RAPCO*)
- Steroids to Reduce Systemic Inflammation After Infant Heart Surgery: The Stress Trial (*STRESS Trial*)
- The Impact of Chinese Herbal Medicine, Tongxinluo in Patients With Acute Myocardial Infarction—Results From the CTS-AMI Trial (*CTS-AMI*)
- Extracorporeal Membrane Oxygenation in the Therapy of Cardiogenic Shock: Primary Results From the Multicenter, Randomized ECMO-CS Trial (*ECMO-CS*)

LBS.04. Mindful Disruption of Chronic HTN Management
3:30-4:30 p.m. | Main Event I

- Effectiveness of a Village Doctor-Led Multifaceted Implementation Strategy on Cardiovascular Disease Among Patients With Hypertension: A Cluster Randomized Trial (*CRHCP*)
- Reducing Inequities in Care of Hypertension: Lifestyle Improvement for Everyone: Blood Pressure and Patient-Reported Outcomes (*The Rich Life Project*)
- The Effect of Adapted Mindfulness Training in Participants With Elevated Office Blood Pressure: The Mindfulness-Based Blood Pressure Reduction (*MB-BP*) Randomized Clinical Trial (*The MB-BP Study*)
- Efficacy and Safety of a Quadruple Ultra-Low-Dose Treatment for Hypertension (*QUARTET USA*): A Randomized Controlled Trial (QUARTET USA)

LBS.05. Changing How We Prevent Cardiovascular and Renal Disease
5-6 p.m. | Main Event I

- Randomized Trial for Evaluating Secondary Prevention Efficacy of Combination Therapy—Statin and Eicosapentaenoic Acid (*RESPECT-EPA*)
- Reduction of Lipoprotein(a) With Small Interfering RNA: The Results of the Ocean(a)-DOSE Trial (*OCEAN(a) DOSE*)
- Empagliflozin and Cardiovascular Outcomes in Patients With Chronic Kidney Disease: The EMPA-KIDNEY Trial (*EMPA-KIDNEY*)
- Effect of Low-Dose Statin Compared With Placebo and Six Dietary Supplements on Lipid and Inflammatory Biomarkers: The SPORT Randomized Clinical Trial (*SPORT*)

LBS.06. Drugs and Strategies in ACS and Revascularization
5-6 p.m. | Main Event II

- Bivalirudin With a Post-PCI High-Dose Infusion Versus Heparin Monotherapy During Primary PCI in Stemi: The Randomized Bright-4 Trial (*BRIGHT-4*)
- Efficacy and Safety of Indobufen Versus Aspirin After Coronary Drug-Eluting Stent Implantation: A Randomized, Open-Label, Non-Inferiority Trial (*OPTION*)
- Comparison of a Precision Care Strategy With Usual Testing to Guide Management of Stable Patients With Suspected Coronary Artery Disease: The Precise Randomized Trial (*PRECISE*)
- ISCHEMIA-EXTENDed Follow-Up Interim Report (*ISCHEMIA-EXTENDed*)

FEATURED SCIENCE

FS.01. In-Depth and Fresh Look in Heart Failure Trials
8-9 a.m.

- The Effect of Percutaneous Revascularization on Arrhythmic Risk in Ischemic Left Ventricular Dysfunction (*REVIVED-BCIS2*)
- Natriuretic Response With Acetazolamide in Acute Heart Failure With Volume Overload: Analysis From the ADVOR Trial (*ADVOR*)
- Decongestion With Acetazolamide in Acute Decompensated Heart Failure Across the Spectrum of Left Ventricular Ejection Fraction: A Pre-Specified Analysis From the Advor Trial (*ADVOR*)
- Empagliflozin and Cardiac Remodeling in People Without Diabetes: Primary Results of EMPA-HEART 2 CardioLink-7 Randomized Placebo-Controlled Trial (*EMPA-HEART 2*)
- First and Repeat Episodes of Worsening Heart Failure in Patients With Heart Failure With Mildly Reduced and Preserved Ejection Fraction: An Analysis of Deliver (*DELIVER*)

FS.02. New Insights — Cardiac Surgery
9:30 -10:30 a.m.

- Myosin Inhibition in Patients With Obstructive HCM Referred for Septal Reduction Therapy: 32-Week Active Blinded Crossover Results From Valor-HCM Trial *(VALOR-HCM)*
- Electrocardiographic Changes After Cardiac Surgery and 30-Day Mortality (*VISION Cardiac Surgery*)
- Interim Results of a Phase 2 Study With RBT-1 Evaluating Postoperative Course in Patients Undergoing Elective CABG/Valve Surgery on Cardiopulmonary Bypass (*The START Study*)
- Results From the Clinical Implementation of Partial Oral Treatment of Patients With Infectious Endocarditis; A Nationwide Study. Time for Poetry?

FS.03. Featured Science in Heart Rhythm Medicine
5-6 p.m.

- Feasibility and Safety of Intravenous Sotalol Administered as a Loading Dose to Initiate Oral Sotalol Therapy in Adult Patients With Atrial Fibrillation - DASH AF Study (*DASH-AF*)
- Subcutaneous Implantable Cardioverter-Defibrillator System Post Approval Study: Primary Results (*S-ICD PAS*)
- Apixaban or Vitamin K Antagonists for Stroke Prevention in Patients With Atrial Fibrillation on Hemodialysis: Results of the Randomized Axadia-AFNET 8 Trial (*AXADIA-AFNET 8*)
- Association of Genetic Risk and Outcomes in Patients With Early Rhythm Control Therapy in Atrial Fibrillation: Results From the East-afnet4 Study (*EAST-AFNET4*)

Check the Mobile Meeting Guide app for updates.

Advances may lead to more powerful therapies for arrhythmia

New technologies mean new ways to tackle old problems.

Substantial advances and novel technologies in arrhythmia treatment and management — some of which are already in practice — could change the future of implantable device therapy, said Mina Chung, MD, FAHA.

"Physiologic pacing has been moving and is being adopted rapidly with studies coming out demonstrating the feasibility and safety of conduction system pacing," said Dr. Chung, cardiac pacing and electrophysiology specialist in the Department of Cardiovascular Medicine, Heart and Vascular Institute at the Cleveland Clinic in Ohio. "And hybrid ablation for atrial fibrillation (AFib) and inappropriate sinus tachycardia both show some hopeful results for difficult cases."


Chung

These and other advances will be discussed during Sunday's session "Novel Technologies for Arrhythmia Therapy."

Other approaches include leadless pacemaker and defibrillator devices with multiple component devices that aim to "overcome the Achilles' heel leads of device therapies," Dr. Chung said.

"Similarly, novel ablation technologies directed toward ventricular tachycardia and AFib are always anticipated and include pulse field ablation and radiation approaches," she said. "Autonomic influences on arrhythmias are also being targeted with devices and show some promise."

Pugal Vijayaraman, MD, system director of electrophysiology services at the Geisinger Heart Institute in Wilkes Barre, Pennsylvania, will explore advances in His bundle pacing (HBP) and left bundle branch pacing (LBBP) as alternatives to right ventricular failure and biventricular pacing.

Noting that biventricular pacing is a powerful therapy to treat heart failure and has reduced mortality and heart failure hospitalization in patients with electromechanical dyssynchrony, Dr. Vijayaraman said it may also be associated with failure to implant, non-response to therapy and anatomical challenges due to the presence of unwanted/unacceptable diaphragmatic stimulation.


Vijayaraman

"Recently, physiologic pacing using HBP or LBBP have been used to achieve normalization of conduction, thereby correcting underlying electromagnetic dyssynchrony in patients with left bundle branch block or right ventricular pacing," he said. "This has been accomplished by placing traditional pacing leads precisely in the region of the conduction system and reversing the abnormal conduction.

"This approach has been shown to be beneficial with high success rates in patients with heart failure, and both left bundle branch block and right bundle branch block."

Dr. Vijayaraman also points to new approaches using a combination of physiologic pacing and left ventricular (coronary sinus) pacing to achieve greater resynchronization in patients with intraventricular conduction delays and mixed conduction disease. He said they have been backed up

See **ARRHYTHMIA THERAPY**, page 6

UPCOMING SESSION

Novel Technologies in Arrhythmia Therapy
Sunday, Nov. 6
9:30 a.m. | Main Event III

Trials' results compare loop and thiazide diuretics and highlight ineffectiveness of novel fibrate therapy for reducing CV risk

Investigators in three trials on Saturday challenged hypotheses and impact of treatment of patients with heart failure, Type 2 diabetes and hypertension during the Late-Breaking Science session "Changing Clinical Practice." They found:

- A strategy of torsemide wasn't more effective than furosemide in preventing mortality in heart failure (HF) patients.
- Pemafibrate, a novel potent peroxisome proliferator-activated receptor (PPAR)-alpha modulator for reducing triglycerides, didn't reduce cardiovascular events in patients with Type 2 diabetes.
- Chlorthalidone wasn't superior to hydrochlorothiazide, but it may confer a benefit in patients with hypertension and history of myocardial infarction (MI) or stroke.

Torsemide didn't reduce mortality compared to furosemide

Mentz

Furosemide is the most commonly used loop diuretic in HF patients. Yet, data suggest a potential advantage with torsemide.

In the Comparative Effectiveness of Torsemide Versus Furosemide in Heart Failure: the TRANSFORM-HF Trial, researchers explored whether torsemide is superior to furosemide to treat HF. The trial found no difference in all-cause mortality between patients with HF taking torsemide or furosemide.

The large-scale, pragmatic, randomized, unblinded trial enrolled 2,859 patients with heart failure regardless of ejection fraction during a HF hospitalization. Patients were randomized to a loop diuretic of torsemide or furosemide with investigator-selected dosing. After the first hospitalization, a study follow-up was centralized via the Duke Clinical Research Institute Call Center with clinical care from the patients' usual care providers and support in place to continue the randomized therapy.

During a median of 17.4 months, deaths occurred in 26.1% of patients in the torsemide group and 26.2% in the furosemide group.

"In this event-driven trial, there was no significant difference in the primary effectiveness outcome of survival between furosemide and torsemide in patients with heart failure," said Robert J. Mentz, MD, the study's co-principal investigator and chief of the Heart Failure Section at Duke University Medical Center in Durham, North Carolina.

Results were similar across prespecified subgroups, including among patients with reduced, mildly reduced or preserved ejection fraction.

"Given the high-event rate in this patient population, there's a need for implementing current evidence-based therapies that improve outcomes and more well-conducted randomized trials similar to TRANSFORM to provide the evidence base we need to make informed decisions about how to take the best care of our patients," Dr. Mentz said. "We explored a common clinical question and have provided a clear answer, that these two diuretics result in similar clinical outcomes."

Major multinational trial fails to show lowering triglycerides lowers cardiovascular risk

Pradhan

Pemafibrate, a novel potent PPAR-alpha modulator, didn't lower the rates of first MI, stroke, cardiovascular death or coronary revascularization in patients with Type 2 diabetes with mixed dyslipidemia, according to A Randomized Trial of Pemafibrate for Triglyceride Reduction in the Prevention of Cardiovascular Disease (PROMINENT Trial).

The international study in 24 countries enrolled 10,497 patients with Type 2 diabetes, mild to moderate hypertriglyceridemia and low HDL-C, and randomized them 1:1 to pemafibrate 0.2 mg tablets BID or placebo with a median follow-up of 3.4 years.

"While pemafibrate reduced triglycerides, VLDL-C, remnant cholesterol and ApoCIII by 20% to 30%, pemafibrate did not reduce cardiovascular event rates in patients with Type 2 diabetes, mild-to-moderate hypertriglyceridemia, low HDL-C and well-controlled LDL-C," said Aruna Pradhan, MD, MPH, associate professor of medicine at Harvard Medical School in Boston. "Roughly 10% had a major heart attack or stroke condition within three years."

After statins, fibrates are the second-most commonly used drug to lower cholesterol. The majority of study participants were also taking statin medication.

"These data highlight the complexity of lipid mediators of residual risk in statin-treated insulin resistant patients," Dr. Pradhan said. "It is possible that beyond the effects on triglyceride-rich lipoprotein remodeling, enhanced clearance of lipoproteins derived remnant catabolism is also needed to neutralize residual risk in hypertriglyceridemia.

"Ongoing trials of agents that use alternative pathways to lower triglycerides and remnant cholesterol, including ApoCIII and angiopoietin-like protein 3 inhibition, may help to clarify these issues."

The study will be published in the *New England Journal of Medicine* following the presentation.

Chlorthalidone wasn't superior to hydrochlorothiazide in patients with hypertension

Ishani

Current blood pressure management guidelines specify that chlorthalidone may be the preferred thiazide diuretic agent for hypertension management, compared to hydrochlorothiazide (HCTZ).

Yet, for preventing cardiovascular disease or noncancer death, chlorthalidone wasn't superior to HCTZ at doses commonly used in clinical practice, according to Chlorthalidone Compared to Hydrochlorothiazide for the Prevention of Cardiovascular Events in Patients with Hypertension, the DCP Trial.

The large pragmatic, randomized control trial enrolled over 13,500 patients with hypertension taking HCTZ (25 mg or 50 mg) at baseline at 537 VA medical centers and community clinics in the U.S. Patients were randomized to stay on their current dose of HCTZ or an equipotent dose of chlorthalidone (12.5 mg or 25 mg).

"We were able to compare the two generic drugs using this low-cost methodology," said Areef Ishani, MD, the study's co-principal investigator and director of the Minneapolis Primary Care and Specialty Care Integrated Care Community (ICC) in St. Paul.

Most study participants (95%) were taking low-dose hydrochlorothiazide. The majority of the study compared 12.5 mg chlorthalidone to 25 mg hydrochlorothiazide.

There was no difference between the two drugs at preventing CV disease or non-cancer death or in the secondary outcomes, which included MI, stroke, heart failure and unstable angina requiring revascularization. There was no difference in mean systolic blood pressure between the two groups, but there was a slight increase in the risk of hospitalization for low potassium in the chlorthalidone versus the hydrochlorothiazide group, which quickly resolved with supplements.

A prespecified subgroup analysis, defined by the presence or absence of stroke or MI at baseline, had a significant qualitative interaction (p=0.002). It suggested a nonsignificant increased risk (p=0.051) of a CV event or non-cancer death in study chlorthalidone participants without MI or stroke at baseline. Chlorthalidone was also associated with an increase of hypokalemia.

Study participants taking chlorthalidone with a history of MI or stroke had a reduced risk of a CV event or non-cancer death.

"It's difficult to understand that result in the context of an overall negative trial," Dr. Ishani said. "We will need another study specifically looking at these two drugs in patients with a history of MI or stroke to see if this is a true effect."

When deciding which thiazide diuretic to prescribe, either drug appears to be acceptable for the vast majority of patients with hypertension in these doses.

"But for patients with a history of MI or stroke, you might consider switching them to chlorthalidone until another study comes out to confirm whether you should or shouldn't," Dr. Ishani said. •

ARRHYTHMIA THERAPY

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by promising results in early, small, observational studies with larger, randomized clinical trials underway.

"These new approaches will provide additional and alternative options to treat patients with heart failure using physiologic pacing in patients who fail traditional biventricular pacing," he said. "Or even as a first-line approach in many patients with preserved synchrony who require ventricular pacing."

In addition, a potential new technology to treat arrhythmias by ablation is on the horizon using a new technique called pulsed-field ablation.

"It uses high voltage for a fraction of a second to precisely and selectively target heart muscle without affecting surrounding structures by means of electroporation and cell death," Dr. Vijayaraman said. "This is a very exciting technology, and many trials are nearing completion. This will have a huge impact in the management of atrial fibrillation making ablation procedures even safer." •

Paul Dudley White International Lecture explores link between poverty, COVID-19 and CVD risk

Internationally acclaimed development economist will present perspectives on global cardiovascular risk reduction.

UPCOMING SESSION

Paul Dudley White International Lecture and Session: Laureate, Storytelling and Perspectives for Syndemic and Global Cardiovascular Risk Reduction
Sunday, Nov. 6
3:30-4:30 p.m. | Main Event II

The effects of economics and COVID-19 on cardiovascular risk will be highlighted by Esther Duflo, PhD, in this year's Paul Dudley White International Lecture.

Dr. Duflo will deliver her lecture "Laureate, Storytelling and Perspectives for Syndemic and Global Cardiovascular Risk Reduction," as part of the Main Event on Sunday.


Duflo

She is the Abdul Latif Jameel Professor of Poverty Alleviation and Development Economics in the Department of Economics at the Massachusetts Institute of Technology in Cambridge. She's also co-founder and co-director of the Abdul Latif Jameel Poverty Action Lab.

Dr. Duflo's research focuses on understanding the economic lives of people with low incomes with the goal to help design and evaluate social policies. She has received numerous academic honors and awards, including the 2019 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel. She's also received the Princess of Asturias Award for Social Sciences; A.SK Social Science Award; Infosys Prize; David N. Kershaw Award; and a MacArther Genius Grant Fellowship.

In addition to those recognitions, Dr. Duflo is co-author of *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*, which won the Financial Times and Goldman Sachs Business Book of the Year Award in 2011. More recently, she authored *Good Economics for Hard Times*.

Dr. Duflo is currently editor of the *American Economic Review*, a member of the National Academy of Sciences and a Corresponding Fellow of the British Academy. •

OPENING SESSION

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of the association itself.

"The mission of the American Heart Association is to be a relentless force for a world of longer, healthier lives and that's what we're here to do these next several days," she said.

She was joined on stage by two former U.S. Surgeons General, the commissioner of the Food and Drug Administration and the president of the World Heart Federation for a lively discussion on how the response of science and medicine to crises around the world can inform the path to public education about health issues.

Regina Benjamin, MD, MBA, served as Surgeon General from 2009-2013. She said disasters such as hurricanes are getting worse, and compounding health problems.

"Hurricanes, Gulf oil spills, ice storms and power grid failures. These disasters are compounding and multiplying the effects and causes of stress," she said. "With each subsequent disaster, you don't go back to your baseline level of stress. Each time, we start at a higher level. We need to build resilient communities and resilient individuals, because it's not just about disasters, it's about how we live between those disasters."

Jerome Adams, MD, MPH, a former Indiana State Health Commissioner who served as Surgeon General from 2017-2021, said we can learn a lot from our national response to the COVID-19 pandemic.

"While we can't let COVID consume us, I do feel like COVID and the legacy of COVID will prove to be one of, if not our biggest, risk factor for cardiovascular negative outcomes moving forward," he said. "The same people who are at high risk for cardiovascular disease, for stroke, for kidney disease, are the ones who are under-boosted in this country right now. Shame on us if every time we see a patient we aren't asking them if they are vaccinated, if they're boosted, if they're up to date on their boosters because that may be the one thing that you all could do for your clinics."

From a global perspective, Dr. Fausto Pinto, MD, PhD, FESC, FACC, FSCAI, FASE, president of the World Heart Federation, said training and needs assessment are the keys to getting the best people in place to respond.

"I feel that we all have that responsibility," he said. "And it's by working together and also applying the solutions according to the needs. And that's one of the important things is to do needs assessment, because of course there are some universal needs but there are some specific needs that may be more relevant in certain parts of the world — even within the same country or within the same region. And that's why it's so important that we have some sort of professional way to do proper training of the next generation."

But all of that won't mean much if we can't combat the growing specter of misinformation, said Robert Califf, MD, U.S. commissioner of the FDA.

"Misinformation is the leading cause of death right now in the U.S.," he said. "There is no way to prove that, but I really do believe that it is."

COVID-19 vaccinations are a perfect example, he said.

"Almost no one should be dying from COVID now because if you're up to date on your vaccination and if you're high risk and you happen to get infected and you take an anti-viral, almost no one is dying from that," he said. "Of the 250 to 300 people a day dying in the U.S., almost 100% of them were not up to date on their vaccinations or did not get treated with an anti-viral." •

Q&A: Michelle A. Albert, MD, MPH, FACC, FAHA

Moving past the status quo to overcome CVD and health disparities

AHA Presidential Address shines a light on differences and solutions

The week prior to Scientific Sessions 2022, *Scientific Sessions Daily News* interviewed Michelle A. Albert, MD, MPH, FACC, FAHA, about advancing health care for global populations. As the American Heart Association president for 2022-23, Dr. Albert is the AHA's top science volunteer. She also presides over the association's Science Advisory & Coordinating Committee. Dr. Albert's work in increasing awareness of health inequities in CVD and its influence on prevention and treatment is the topic of today's Lewis A. Conner Presidential Address.

Q You have an extensive background in bringing awareness to adversity and health disparities in cardiology. In studying the social determinants of health, and how an understanding of these can transform the health care of global populations, do you feel this is making a difference in preventive strategies for patient heart health?

Dr. Albert: If you look at 2017 ACC/AHA guidelines, which I was a part of, there's a section about social determinants of health and what to do for the different cardiovascular disease risk factors. To the best of my knowledge, it is the first ACC/AHA guideline to include a section with recommendations about social determinants of health. In general, the medical community is more currently sensitized about social determinants of health given the events of the past two years. More peer-reviewed articles are appearing in our medical journals about social determinants and health. AHA journals have an overarching health equity editorial board. The term adversity is beginning to be used to refer to adults and cardiovascular health. Traditionally, adverse childhood experiences have been studied in the pediatric and psychology arenas but not so much in adult cardiology. Hopefully, this momentum can continue and translate into consequential meaningfulness for the health of our patients and populations. On a cautionary note, though, there is also increasing push back related to the implications of this sensitization.

Q Can you give me some examples of health disparities in cardiac care (patient and health care professional) and how these need to be corrected?

Dr. Albert: Some examples include cardiovascular procedures — including heart bypass, angioplasty and stenting and cardiac defibrillators — which are less likely performed or implanted, though, when indicated in Black patients compared to white patients. For example, we published research in *Circulation* showing that Massachusetts Health Care Reform did not improve disparities in the receipt of bypass surgery or angioplasty by race and ethnicity or socioeconomic status.

Addressing health inequities requires action at multiple levels across sectors, including increased awareness and solutions addressing structural racism at the undergraduate and graduate medical levels, policy interventions, implicit bias training including assessment of the impact of that training and cultural competency training to name a few items.

Additionally, we need to listen to our patients' concerns closely and have empathy. When my patients come to my clinic, the very first thing they tell me is that they know I will listen to them and their concerns as others have told them so. They know that I care about them and meet them where they are to address their specific needs and not only what I believe needs to be addressed.

Q Your work has been described as following a "non-traditional" path. In what way do you believe that to be true?

Dr. Albert: On a very personal level, for a large part of my career, I have felt pretty isolated socially and academically. My interest in working on psychosocial stressors and adversity are not usually natural content for late-breaking cardiovascular science or cardiovascular clinical conference. Traditionally, when I attended non-epidemiology focused scientific conferences from the time since I was a fellow, race, ethnicity and psychosocial factors were generally not content for late-breaking clinical trials/science. Well, we know that therapies from these trials do not equitably get to everyone, especially persons from racially or ethnically underserved groups as well as socioeconomically disadvantaged people. So, there exists great need to diversify principal investigators and participants in clinical trials, along with performing implementation work that addresses psychosocial barriers alongside community organizations. I had to learn early in my career how to reach across the aisle to work with investigators and be mentored by persons from other disciplines outside of cardiology, such as sociology, psychiatry, public health and psychology. I realize now how this latter experience superbly prepared me for my ongoing career.

In terms of taking a non-traditional approach, this has been my work for the last 20 years and not just the last two to three years that people have been talking about social determinants of health. My early work studied biomarkers of CVD and social determinants. For example, our team published the first large paper about the relationship of discrimination with cancer and cardiovascular mortality. One challenge is that today everyone feels that they are an expert on social determinants of health. Moreover, it is still tougher to receive grants and get papers published that focus on social factors. I believe that I can speak to this issue well as I have experience in doing molecular and genetic biomarker research, epidemiology, clinical trials and psychosocial research. I have a lot of respect for my colleagues in the PhD arena who have struggled to get their empirical work about social factors and health published in medical journals.

Q What's on the horizon for you to tackle in terms of health disparities and heart health?

Dr. Albert: I am looking for ways that I can continue to push myself toward implementation science solutions to help address health inequities. Also, I hope to grow into roles that challenge me to push myself and the envelope in new ways.

Q What do you hope your Presidential Address will inspire?

Dr. Albert: I hope my address will encourage people to make a difference wherever they are and not continue to think of things like economic or other times of toxic adversity as insurmountable. It is always important to act locally with an eye toward a global reach. Our global reach includes mentoring and sponsoring persons from diverse international backgrounds. •

Exhibitors

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Charmcare Co. Ltd.	2906
CSL Behring	1804
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Cytokinetics	1604
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Dexcom	2216
Doximity	1858
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Esperion Therapeutics	1010
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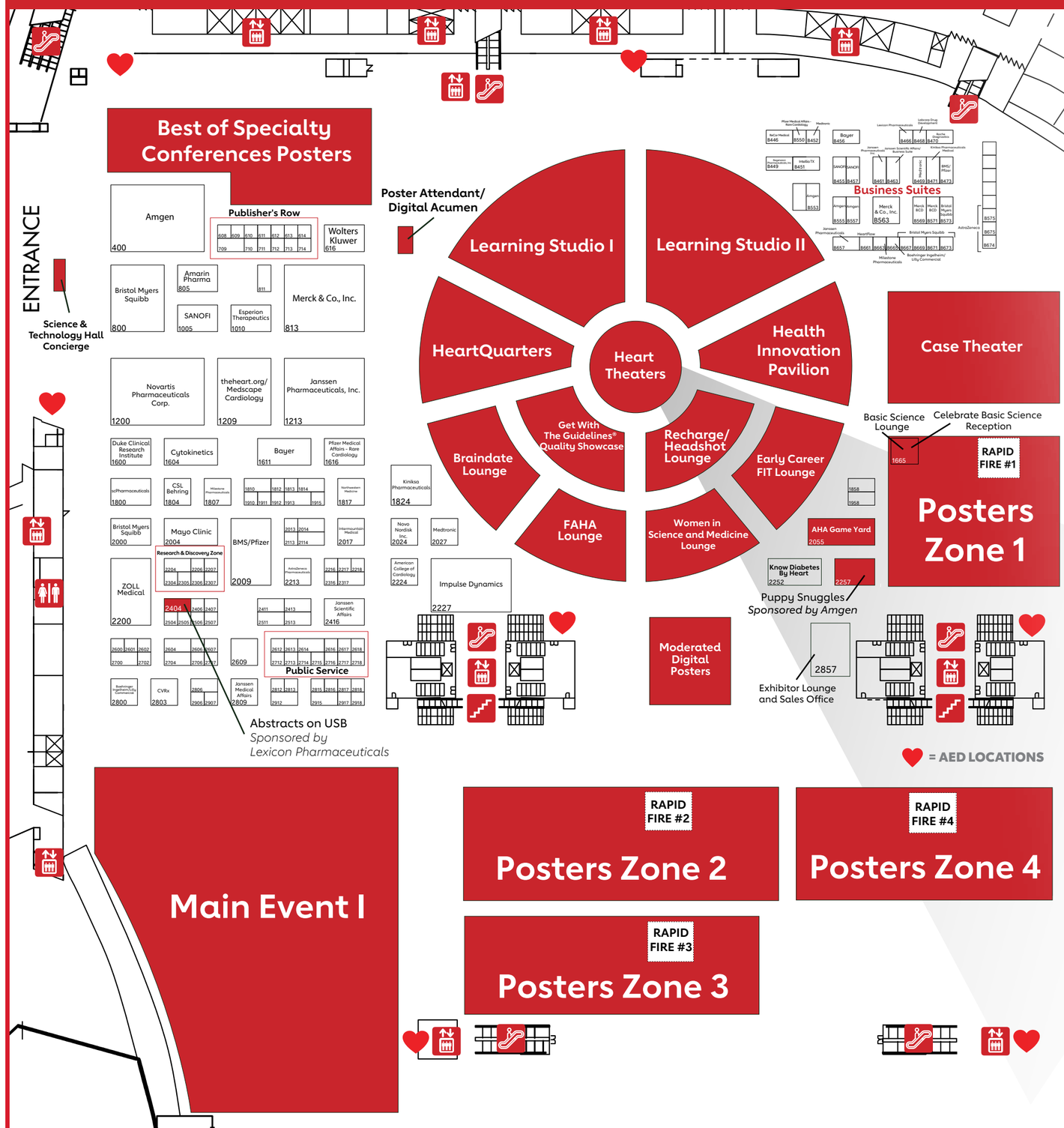
Science & Technology Hall

South Hall, Third Floor

HOURS

Sunday, Nov. 6
9 a.m.-5 p.m.

Monday, Nov. 7
9 a.m.-3 p.m.



Heart Hub

The Heart Hub is a unique learning and networking destination where attendees can participate in a variety of immersive, interactive and educational opportunities all in one place.

The Heart Hub includes:

- Learning Studios
- Health Innovation Pavilion
- Early Career & FIT Lounge
- Women in Science & Medicine Lounge
- FAHA Lounge
- Braindate Lounge
- Recharge/ Headshot Lounge
- Get With The Guidelines® Quality Showcase
- Heart Theaters
- HeartQuarters

Learning Studios

Learning Studios provide a unique opportunity for companies in the field of cardiology to share their latest advances in cardiovascular practices, services and technologies.

See the Mobile Meeting Guide App for more details.

Sunday, Nov. 6

TIME	LOCATION	SUPPORTER	TITLE
9:30-10:15 a.m.	Learning Studio II	Cytokinetics, Inc.	Is the Burden of Symptomatic Chronic HFrEF Inevitable? Defining and Recognizing Early Signs or Symptoms of WHF
11-11:45 a.m.	Learning Studio I	Novartis Pharmaceuticals Corporation	How Can Twice-Yearly* LEQVIO Help Certain ASCVD Patients Who Are Overburdened by the Daily Demands of their Treatment Plan? *After 2 Initial Doses
	Learning Studio II	Sanofi	Changing Views on Rhythm Control: Is Earlier Better for Improving Outcomes in AF Patients?
12:15-1 p.m.	Learning Studio I	Amgen, Inc.	Targeting LDL-C in ASCVD Patients: Are We There Yet?
	Learning Studio II	Merck	Treatment Considerations for Patients with HFrEF and Select Updates From the 2022 HF Guideline
3:30-4:15 p.m.	Learning Studio I	American Heart Association & National Hispanic Latino Cardiovascular Collaborative (NHLCC)	Fostering the Future of Hispanic Health
	Learning Studio II	American Heart Association Lifelong Learning	The Role of Antiarrhythmic Drugs in Early Rhythm Control and the Management of Atrial Fibrillation

Monday, Nov. 7

TIME	LOCATION	SUPPORTER	TITLE
9:30-10:15 a.m.	Learning Studio I	Kiniksa Pharmaceuticals	Treating Recurrent Pericarditis and Preventing Recurrence

Roundtables

Join in on small-group, topic-driven discussions to flesh out ideas and science with colleagues.

Sunday, Nov. 6

TIME	LOCATION	SUPPORTER	TITLE
11-11:30 a.m.	Heart Theater II	Impulse Dynamics	Operationalizing CCM® Therapy
3:30-5 p.m.	Heart Theater II	NHLBI Showcase	NHLBI Company Showcase

INCLUSIVITY

continued from page 1

is more students going into STEM and medicine in particular. That requires understanding why some thrive and survive in those environments while others don't.

"If students come to us with different types of backgrounds — some because of socioeconomic status, because of their family status less prepared than others — what is it that we must do? Is it fixing them, or is it really thinking about our system? I would venture to say it's really thinking about the system."

Mark Johnson, MD, PhD, professor of neurological surgery and senior consulting vice provost for mentorship, leadership and transformation at the University of Massachusetts Medical School, said historically black colleges and universities (HBCUs) could play a critical role in reshaping the system.

"The value of HBCUs in helping to expand the diversity of the workforce is large," he said. "Many of the social and political problems in our country that necessitated the creation of these schools still exist today."

Fidencio Saldana, MD, MPH, dean of students at Harvard Medical School, said that while these problems may seem overwhelming, people can address these issues in their everyday lives.

"What," he asked the audience, "can you do as an individual to help with this issue? If you're a trainee, maybe consider going into academic medicine and being a dean or a faculty member or a dean of admissions to help with the pipeline. If you are a practicing clinician, a cardiologist, could you come to the admissions committee meeting at your medical school or at your residency or at your fellowship? All of you can do one thing today or when you go home to help us improve this issue."

Katrina Armstrong, MD, Jackson Professor of Clinical Medicine at Harvard Medical School, said medical professionals need to create opportunities for diversity to thrive.

"I do think that being able to fit what you're doing every day, just get up every day and try to move this forward and recognize that what works in one place may not work in another," she said. "I do think that this issue of allowing people — everyone — to have the tools, the curiosity, the commitment to talent is critical. I often use the line from Paul Farmer, which is that talent is equally distributed and opportunity is not." •

Q&A: With Gregg Semenza, MD, PhD

Breathing new life into understanding and treating ischemic cardiovascular disease

Prior to Scientific Sessions 2022, *Scientific Sessions Daily News* spoke with Gregg Semenza, MD, PhD, about molecular mechanisms of oxygen homeostasis.

One of today's preeminent researchers on the molecular mechanisms of oxygen regulation, Dr. Semenza has led the field in uncovering how cells adapt to changing oxygen levels. He is best known for his Nobel Prize-winning discovery of the HIF-1 (hypoxia-inducible factor 1) protein, which controls changes in gene expression in response to changes in oxygen availability. The discovery of HIF-1 has far-reaching implications for understanding and treating conditions, such as cancer and ischemic cardiovascular disease, in which hypoxia plays an important role in disease pathogenesis. Dr. Semenza shared the 2019 award with William G. Kaelin Jr., MD, of the Dana-Farber Cancer Institute, and Peter J. Ratcliffe of Oxford University.

Q You have an extensive and Nobel Prize-winning background in studying the behavior of cells in low oxygen settings and the impact of that work in understanding and treating various illnesses and diseases. Can you describe the impact of your work in treating coronary artery disease?

Dr. Semenza: Hypoxia-inducible factors (HIFs) increase the transcription of genes encoding proteins, such as angiogenic growth factors. That increases the delivery of oxygen to hypoxic cells, and genes encoding proteins, such as glycolytic enzymes, which allows cells to survive oxygen deprivation. Among individuals with coronary artery disease who develop critical stenosis of a main coronary artery, two-thirds have collateral blood vessels that perfuse the heart tissue downstream of the obstruction and one-third do not. The patients with collaterals are more likely to survive after myocardial infarction than those without collaterals.

In collaboration with Dr. Jon Resar, we analyzed 100 consecutive patients who were found to have critical stenosis of a major coronary artery for the presence of a single nucleotide polymorphism (SNP) in the HIF1A gene that changes proline to serine at amino acid residue 582 of HIF-1alpha. We found that the frequency of the SNP was five times higher in patients who lacked coronary collaterals as compared to patients with collaterals. This suggests that genetic variation at the locus encoding HIF-1alpha may play a role in determining collateral formation in patients with coronary artery disease. Gain-of-function and loss-of-function studies in mice established that HIFs mediate ischemia-induced vascular remodeling. This occurs by activating the transcription of vascular endothelial growth factor A and other angiogenic growth factors. We found that the age-dependent impairment in the vascular response to ischemia was due to impaired HIF activity in a mouse model of peripheral arterial disease. We also showed that HIF-1alpha was required for protection of the heart by ischemic preconditioning. Taken together, work from our lab and many others indicate that HIFs play critical roles in the pathophysiology of ischemic cardiovascular disease.

Q Can you explain how your studies have or will translate into treatment?

Dr. Semenza: We have shown in mouse models of peripheral arterial disease that we can overcome the age-related impairment of ischemia-induced vascular remodeling by combining HIF-1alpha gene therapy with bone marrow-derived angiogenic cell therapy. Recently, drugs that induce HIF activity have been developed by several pharmaceutical companies. However, clinical trials are needed to investigate whether these drugs will benefit patients with peripheral arterial disease or coronary artery disease. A HIF-2alpha inhibitor was recently approved by the FDA for the treatment of renal cell carcinoma.

Q How do you hope to inspire others with your lecture?

Dr. Semenza: Hypoxia-inducible factors play important protective roles in the pathophysiology of ischemic cardiovascular disease, and strategies to increase HIF activity may have therapeutic utility. Our work illustrates the importance of basic research and its potential for translation into clinical practice.

Q Do you have a personal story of how you developed this expertise in your career?

Dr. Semenza: We had the good fortune to collaborate with several colleagues in cardiology at Johns Hopkins who helped us to investigate the roles of HIFs in ischemic cardiovascular disease. •

Dr. Semenza will present his Nobel Laureate Lecture "Hypoxia-Inducible Factors in Physiology and Medicine" at 9:30 a.m. Sunday. Dr. Semenza is the director of the vascular program at the Institute for Cell Engineering and professor of genetic medicine at Johns Hopkins Medicine in Baltimore, Maryland.

AHA 2022 AWARDS

The AHA selects seven Distinguished Scientists

The American Heart Association designates the Distinguished Scientist award for AHA members who have significantly advanced the understanding of cardiovascular, stroke or brain health. The 2022 awardees will be honored during Scientific Sessions, joining the ranks of other eminent professionals.

Emelia J. Benjamin, MD, ScM, FAHA

Professor of Medicine and Epidemiology
Boston University Schools of Medicine and Public Health
Associate Provost for Faculty Development, Boston University Medical Campus
Boston, Massachusetts

Dr. Benjamin is a Boston University (BU) professor of medicine and epidemiology and a cardiologist at Boston Medical Center, New England's largest safety net hospital. She is a foremost international expert on the epidemiology of atrial fibrillation (AF). She co-leads the National Heart, Lung, and Blood Institute's AF Research Working Group, defining future research directions and leading statements on AF's screening, secondary prevention and social determinants.

A Framingham Study investigator, she has been NIH funded since 1998. She has volunteered for the American Heart Association (AHA) since the 1990s and has chaired the Science and Clinical Education Lifelong Learning Committee, the Heart Disease and Stroke Statistics Committee, the Functional Genomics and Translational Biology Council and the Genomics and Translational Biology, Epidemiology Research Study Section. She also chaired the Research Leaders Academy and served as Science Representative on the national Board of Directors. She was president of the AHA Boston Board, has led diverse AHA research fellowships since 2013 and is a member of the Supporting Undergraduate Research Experiences Oversight Advisory Committee for diverse undergraduates.

Dr. Benjamin is the inaugural associate provost for faculty development, BU Medical Campus, and co-designed and facilitates multiple longitudinal faculty development programs. She has also led implicit bias trainings for BU and the AHA. She has won national awards for research, education, mentoring and diversity, including the Alliance for Academic Internal Medicine's 2020 Diversity and Inclusion Award.

Lisa A. Cooper, MD, MPH, FAHA

James F. Fries Professor of Medicine and Bloomberg Distinguished Professor Johns Hopkins University Schools of Medicine, Nursing and Public Health
Baltimore, Maryland

Dr. Cooper is the James F. Fries Professor of Medicine and Bloomberg Distinguished Professor of Equity in Health and Health Care at Johns Hopkins University Schools of Medicine, Nursing, and Bloomberg School of Public Health. She is also the founder and director of the Johns Hopkins Center for Health Equity.

A general internist, epidemiologist and health services researcher, Dr. Cooper studies how racism and socioeconomic factors shape patient care, and how health systems, with communities, can improve the health of populations with complex medical and social needs. She and her colleagues work in partnership with health systems and community-based organizations to identify interventions that alleviate racial and income health disparities and translate them into practice and policy changes that mean better health for communities.

The author of the book, "Why Are Health Disparities Everyone's Problem?" (Johns Hopkins University Press, 2021), Dr. Cooper is a 2007 MacArthur Fellow and an elected member of the National Academy of Medicine, the American Society for Clinical Investigation and the Association of American Physicians. She is a recipient of the Herbert W. Nickens Award for outstanding contributions to promoting social justice in medical education and equity in health care from the Association of American Medical Colleges and the Helen Rodriguez-Trias Social Justice Award from the American Public Health Association. Dr. Cooper has served as a trustee of the American Heart Association (Mid-Atlantic Affiliate and Greater Baltimore Chapter). In September 2021, she was appointed by President Joseph Biden to the President's Council of Advisors on Science and Technology.

David A. Kass, MD, FAHA

Abraham and Virginia Weiss Professor of Cardiology
Professor of Biomedical EngineeringProfessor of Pharmacology and Molecular Sciences
Director, Institute of CardioScience at Johns Hopkins University School of Medicine
Baltimore, Maryland

Dr. Kass joined the Cardiology Division at Johns Hopkins University as a fellow, and has remained there since. He is considered a world leader in the pathobiology and therapy of heart failure, cardiac physiology and mechanics, as well as cyclic GMP-protein kinase G and phosphodiesterase signaling.

His research is expansive, providing innovative landmark studies in many fields from basic molecular and cellular studies to human clinical trials. His initial work was as an integrative physiologist studying ventricular and vascular function and identifying mechanisms of human heart failure and hypertrophy.

He pioneered pressure-volume analysis in humans, and later in mice, and played a major role in developing cardiac resynchronization therapy (later studied at molecular and cellular levels). In the late 1990s, he ventured into molecular/cellular studies of heart failure and cGMP/protein kinase G signaling.

He developed novel heart failure therapies, patents and start-up companies. Recent translational efforts offer treatment for Duchenne Muscular Dystrophy, right and left heart failure and cardiometabolic disease. Among his honors are the 2020 Louis and Artur Lucien Award, the AHA Basic Science Award, George Brown Lectureship and Inaugural Melvin Marcus Award, Peter Harris Distinguished Scholar Award and Innovator Award from the International Society of Heart Research and National Institutes of Health Outstanding Investigator Award.

In his spare time, he plays clarinet, cooks and is raising a new long-haired dachshund puppy.

Bruce Ovbiagele, MD, MSc, MAS, MBA, MLS, FAHA

Professor of Neurology and Associate Dean
The University of California, San Francisco
Chief of Staff San Francisco Veterans Affairs Health Care System
San Francisco, California

Dr. Ovbiagele is a vascular neurologist, clinical epidemiologist and health equity scholar. He is professor of neurology and associate dean at the University of California, San Francisco as well as chief of staff at the San Francisco Veterans Affairs Health Care System. He maintains adjunct professorships at universities in Africa, Asia and South America.

Dr. Ovbiagele's research studies have greatly advanced knowledge of stroke epidemiology, mechanisms and management among disparate populations in the United States and Africa, and his research training programs are diversifying the academic neurology workforces in both regions.

He served as the inaugural national medical spokesperson for the Power to End Stroke campaign, which focused on raising awareness about the disproportionate burden of stroke experienced by Black people in America, lead author of the AHA policy paper "Forecasting the Future of Stroke in the United States," and vice chair of the 2014 AHA Secondary Stroke Prevention Writing Panel.

He has received multiple awards, including the Mridha Humanitarian Award from the American Brain Foundation; Pessin Lectureship Award and Wartenberg Lectureship Award from the American Academy of Neurology; Feinberg Lectureship Award from the American Stroke Association; Penn Lectureship Award from the American Neurological Association; Meritorious Achievement Award from the National Medical Association; Haddock International Impact Award and Stroke Council Award from the American Heart Association.

He was chair of the AHA International Stroke Conference (2016-2018). Dr. Ovbiagele is an elected fellow of the World Stroke Organization, American Academy of Neurology, American Heart Association, European Stroke Organization, Royal College of Physicians, Royal Society of Public Health, and African Academy of Sciences; and an elected member of the National Academy of Medicine.

Susan E. Quaggin, MD, FAHA

Charles Horace Mayo Professor and Chief, Nephrology/Hypertension;
Director, Feinberg Cardiovascular & Renal Research Institute
Northwestern University
Chicago, Illinois

Dr. Quaggin is a graduate of the University of Toronto where she completed her residency and served as chief medical resident for the university's St. Michael's Hospital. She completed her nephrology fellowship at the University of Toronto and Yale University, where she also completed research and post-doctoral training.

Dr. Quaggin's research focuses on fundamental processes needed to establish and maintain the integrity of the specialized vascular beds in the kidney, cardiovascular system and the eye. Translation of her group's findings regarding the vasculature reveals pathogenic mechanisms and new therapeutic targets for a number of diseases, including diabetic kidney and eye disease, nephrotic syndrome, microangiopathic thrombotic disorders and glaucoma.

She is the Charles Horace Mayo professor of medicine at Northwestern University where she serves as the chief of the Division of Nephrology and Hypertension and the director of the Feinberg Cardiovascular and Renal Research Institute. Dr. Quaggin was elected to the American Society for Clinical Investigation in 2006, the Association of American Physicians in 2013, the National Academy of Medicine in 2019 and the National Academy of Inventors in 2021, and is President of the American Society of Nephrology and councilor of the Association of American Physicians.

Ralph L. Sacco, MD, MS, FAHA

Professor, Chair of Neurology and Senior Associate Dean for Clinical and Translational Research
University of Miami
Miami, Florida

Dr. Sacco is the chairman of Neurology, Olemberg Family Chair in Neurological Disorders, Miller Professor of Neurology, Public Health Sciences, Human Genetics, and Neurosurgery, senior associate dean for Clinical and Translational Science, executive director of the Evelyn F. McKnight Brain Institute at the Miller School of Medicine, University of Miami, and chief of the Neurology Service at Jackson Hospital System.

He was previously professor of neurology, chief of the Stroke and Critical Care Division and associate chairman at Columbia University. Dr. Sacco has published extensively with 761 articles (H-index of 160). He has been listed as a Highly Cited Researcher in the top 1% of cited investigators annually since 2017 by the Clarivate Web of Science.

He has been the recipient of numerous awards, including the American Heart Association Feinberg Award of Excellence in Clinical Stroke, the NINDS Javits Award in Neuroscience and the AAN Wartenberg Lecture Award. He is the editor-in-chief of the American Stroke Association journal, Stroke. He was the first neurologist to serve as the president of the American Heart Association (2010-11) and a past president of the American Academy of Neurology (2017-19). He is also an elected member of the National Academy of Medicine and the Association of American Physicians.

Kevin G. Volpp, MD, PhD, FAHA

Mark V. Pauly Presidential Distinguished Professor
Perelman School of Medicine and the Wharton School
Director, Penn Center for Health Incentives and Behavioral Economics
Wynnewood, Pennsylvania

Dr. Volpp is the founding director of the Penn Center for Health Incentives and Behavioral Economics (CHIBE) and the Mark V. Pauly President's Distinguished Professor at the Perelman School of Medicine and the Wharton School of the University of Pennsylvania. He has led CHIBE since its inception, turning it into an entity which became one of two original NIH Centers on behavioral economics and health and that involves more than 90 faculty members and trainees.

Dr. Volpp's work focuses on developing and testing innovative ways of applying insights from behavioral economics in improving patient health behavior and increasing health system value by influencing provider performance. His work has served as the foundation for benefit design initiatives using financial incentives for smoking cessation used by many large employers, including GE and CVS, a prescription refill synchronization program for Humana members, a redesign of a primary care physician payment for clinicians across Hawaii, a simple health insurance plan called "Humana Simplicity" and an "enhanced active choice" approach used among tens of millions of CVS members to increase the ease of receiving automated medication refills.

Dr. Volpp's work has been recognized by the Matilda White Riley Award by the Office of Social and Behavioral Science at NIH, the John Eisenberg Award from the Society of General Internal Medicine, the American College of Physicians Behavioral Medicine Award and the Association for Clinical and Translational Science Distinguished Investigator Award for Clinical and Translational Science, and article-of-the-year awards by numerous professional societies. Dr. Volpp is an elected member of the National Academy of Medicine and an editorial board member of NEJM Catalyst. •

AHA 2022 AWARDS

2022 AHA Scientific Council Awards

Every year, the American Heart Association's scientific councils award recipients for their meritorious efforts. Here are the 2022 recipients of the Distinguished Achievement Awards, Special Lectures, Named Lectures, Special Recognition, Best Abstracts and Early Career Abstracts awards by council:

Distinguished Achievement Awards

Council on Arteriosclerosis, Thrombosis and Vascular Biology (ATVB) Distinguished Achievement Award in Thrombosis
Steven Lentz, MD, PhD, FAHA

Council on Basic Cardiovascular Sciences (BCVS) Distinguished Achievement Award
Sean M. Wu, MD, PhD

Council on Clinical Cardiology (CLCD) Distinguished Achievement Award
Robert A. Harrington, MD, FAHA

Council on Cardiovascular Surgery and Anesthesia (CVSA) Distinguished Achievement Award
Jennifer S. Lawton, MD, FACS, FAHA

Council on Lifestyle and Cardiometabolic Health Distinguished Achievement Award
Penny M. Kris-Etherton, PhD, RD, FAHA

Council on Peripheral Vascular Disease (PVD) Distinguished Achievement Award
Mary M. McDermott, MD, FAHA

Special Lectures

Lewis A. Conner Presidential Address
Michelle A. Albert, MD, MPH, FACC, FAHA

Annual Dr. Nanette K. Wenger Research Goes Red® Award for Best Scientific Article on Cardiovascular Disease and Stroke in Women
Harriette G.C. Van Spall, MD, MPH
Erica P. Gunderson, PhD, MS, MPH

Distinguished Scientist Lecture
Suzanne Oparil, MD, FAHA

Nobel Laureate Lecture
Gregg L. Semenza, MD, PhD

Paul Dudley White Lecture
Esther Duflo, PhD

Named Lectures

Ancel Keys Memorial Lecture
Donna K. Arnett, PhD, MPH, FAHA

Charles T. Dotter Memorial Lecture
Karen G. Ordovas, MD, FAHA

Dickinson W. Richards Memorial Lecture
Clifton W. Callaway, MD, PhD, FAHA

Genomic and Precision Medicine and Epidemiology Mid-Career Research Award and Lecture
Kathryn M. Rexrode, MD, MPH, FAHA

George E. Brown Memorial Lecture
Sumanth D. Prabhu, MD, FAHA

George Lyman Duff Memorial Lecture
Alan Daugherty, PhD, DSc, FAHA

James B. Herrick Award for Outstanding Achievement in Clinical Cardiology
Pamela S. Douglas, MD, FAHA

Katharine A. Lembright Award and Lecture
Lorraine S. Evangelista, PhD, RN, CNS, WAN, FAHA

Kathleen A. Dracup Distinguished Lecture Exemplary Career in Mentoring Award
Bunny J. Pozehl, PhD, APRN-NP, FAHA

Kenneth D. Bloch Memorial Lecture in Vascular Biology
Rhian M. Touyz, PhD, MBBCh, MSc (Med), FAHA

Laennec Clinician-Educator Award & Lecture
Jon A. Kobashigawa, MD, FAHA

Robert Levy Memorial Lecture
William Virgil Brown, MD, FAHA

Russell Ross Memorial Lecture in Vascular Biology
William C. Sessa, PhD, FAHA

Sol Sherry Distinguished Lecture in Thrombosis
Marvin Nieman, PhD, FAHA

Stroke Council Award & Lecture
Nestor Gonzalez, MD, MSc, FAHA

T. Duckett Jones Memorial Lecture
Liesl Zühlke, PhD, MB ChB, DCH, FCPaeds, Cert Card, MPH, MSc

Thomas W. Smith Memorial Lecture
Leslie Leinwand, PhD, FAHA

William W. L. Glenn Lecture
Bartley P. Griffith, MD

William J. Rashkind Memorial Lecture
Dayna Bowen Matthew, JD, PhD

Special Recognition

Council on Arteriosclerosis, Thrombosis and Vascular Biology (ATVB)

Special Recognition Award in Thrombosis
Magdalena Chrzanowska, PhD, MSc, FAHA

Special Recognition Award in Arteriosclerosis
Sean Davidson, PhD, FAHA

Special Recognition Award in Vascular Biology
Rebecca Haeusler, PhD

Council on Cardiovascular and Stroke Nursing (CVSN)

CVSN Clinical Article of the Year Award
Leslie L. Davis, PhD, ANP-BC, FAHA

CVSN Mathy Mezey Excellence in Aging Award
Misook Lee Chung, PhD, RN, FAHA

CVSN Research Article of the Year Award
Ruth M. Masterson Creber, PhD, MSc, RN, FAHA

CVSN Stroke Article of the Year Award
Ann Leonhardt-Caprio, DNP, RN, ANP-BC, SCRN, FAHA

Council on Clinical Cardiology (CLCD)

Women in Cardiology Mentoring Award
Sharmila Dorbala, MD, MPH, MASNC
Roxana Mehran, MD, FAHA

Laennec Master Clinician Award
JoAnn Lindenfeld, MD, FAHA

Council on Genomic and Precision Medicine (GPM)

GPM Medal of Honor
Daniel Rader, MD, FAHA

GPM Mentoring Award
Svati Shah, MD, MHSc, FAHA

Council on Lifelong Congenital Heart Disease and Heart Health in the Young (Young Hearts)

Outstanding Research Award in Pediatric Cardiology
Simon Lee, MD
Kimberley Miles, MD
Michael A. Portman, MD, FAHA

Young Hearts Meritorious Achievement Award
Roberta G. Williams, MD, FAHA

Best Abstract Awards

3CPR Best Abstract Award Winner (Cardiopulmonary/ Critical Care)
Hyunbum Kim, PhD

CVSN Best Abstract Award
Geunyeong Cha, MSN

Early Career Abstracts Awards

Quest Diagnostics and Steve Rusckowski Early Career Investigator Award for Preventive Cardiovascular Medicine Research
Sponsored by Quest Diagnostics Center of Excellence for Cardiometabolic Testing at Cleveland Heart Lab

Tara Shrout Allen, MD, MSc
Amélie Paquin, MD, MSc
Renato Quispe, MD, MHS
Nilay S. Shah, MD, MPH
Sarah Margaret Urbut, MD, PhD

Council on Arteriosclerosis, Thrombosis and Vascular Biology (ATVB)

Elaine W. Raines Early Career Investigator Award
Sarvesh Chelvanambi, PhD
Aikaterini Gatsiou, PhD, MSc
Khalia Primer
Adil Rasheed, PhD

Council on Basic Cardiovascular Sciences (BCVS)

Louis N. and Arnold M. Katz Basic Science Research Prize for Early Career Investigators
Erik A. Blackwood, PhD
Yang Cao, PhD
Jingshu Chen, PhD
Inna Rabinovich-Nikitin, PhD

Melvin L. Marcus Early Career Investigator Award in Cardiovascular Sciences
Ajit Magadum, PhD
Shruti Rawal, PhD
Vagner O. C. Rigaud, PhD
Vivek P. Jani, MS

Council on Cardiopulmonary, Critical Care, Perioperative and Resuscitation (3CPR)

Cournand and Comroe Early Career Investigator Award
Zhiyu Dai, PhD, FAHA
Lloyd David Harvey, MD, PhD
Kenzo Ichimura, MD, PhD
Takamitsu Ikeda, MD, PhD
Jennifer Tegan Middleton, MBChB

Council on Cardiovascular Surgery and Anesthesia (CVSA)

Council on Cardiovascular Surgery and Anesthesia Early Career Investigator Abstract Award
Nikhil Mistry, MSc
Siavash Zamirpour

Vivien Thomas Early Career Investigator Award
Sharif A. Sabe, MD
Jakob Wollborn, MD
Cynthia Xu, MD
Weiang Yan, MD

Council on Cardiovascular and Stroke Nursing (CVSN)

Martha N. Hill Early Career Investigator Award
Soojung Ahn, PhD, RN
Solim Lee, PhD, RN
Meghan Reading Turchioe, PhD, MPH, RN

CVSN Marie Cowan Promising Early Career Investigator Award
Windy W. Alonso, PhD, RN

Council on Clinical Cardiology (CLCD)

Laennec Fellow in Training (FIT) Clinician Award
Evan K. Harmon, MD
Anantha S. Madgula, MD
Nitin Malik, MD
John W. Ostrominski, MD
Ayesha Salahuddin, MD

Samuel A. Levine Early Career Clinical Investigator Award
Jonathan Ariyaratnam, MB Bchir, MA, Mres, MRCP
Aakriti Gupta, MD, MSc
Cian P. McCarthy, MB, BCh, BAO
Matthew W. Segar, MD, MS
Brian Yu

Council on Cardiovascular Radiology and Intervention (CVRI)

Melvin Judkins Early Career Clinical Investigator Award
Nasir Hussain, MD
Takako Nagata, MD
Chaitanya Rojulpote, MBBS
Lingyu Xu, MD, PhD

Council on Epidemiology and Prevention

Elizabeth Barrett-Connor Research Award for Early Career Investigators
Joanna Nicole Assadourian
Minoo Bagheri, PhD, MSc
Kosuke Inoue, MD, PhD
Xiaoming Jia, MD
Veer Sangha

Council on Genomic and Precision Medicine (GPM)

Genomic and Precision Medicine Early Career Investigator Award
Derek Klarin, MD
Vibhu Parcha, MD
Prashant Rao, MBBS, MRCP
Elizabeth Zhao

Council on Lifestyle and Cardiometabolic Health

Lifestyle and Cardiometabolic Health Early Career Investigator Award
Nour Makarem, PhD
Amgad Mentias, MD, MS
Alice-Mihaela Mezincescu, PhD, MRCP, DM

Council on Lifelong Congenital Heart Disease and Heart Health in the Young (Young Hearts)

Young Hearts Early Career Investigator Award
Benjamin S. Frank, MD
Anastacia M. Garcia, PhD
Robin Perelli, MS
Aditya Sengupta, MD
Rachel Shustak, MD

Council on Peripheral Vascular Disease (PVD)

Jay D. Coffman Early Career Investigator Award
Jonathan Hanna, MD
Michael Levin, MD

Congratulations to all the 2022 recipients.

American Heart Association.

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stroke.org/SecondaryPrevention

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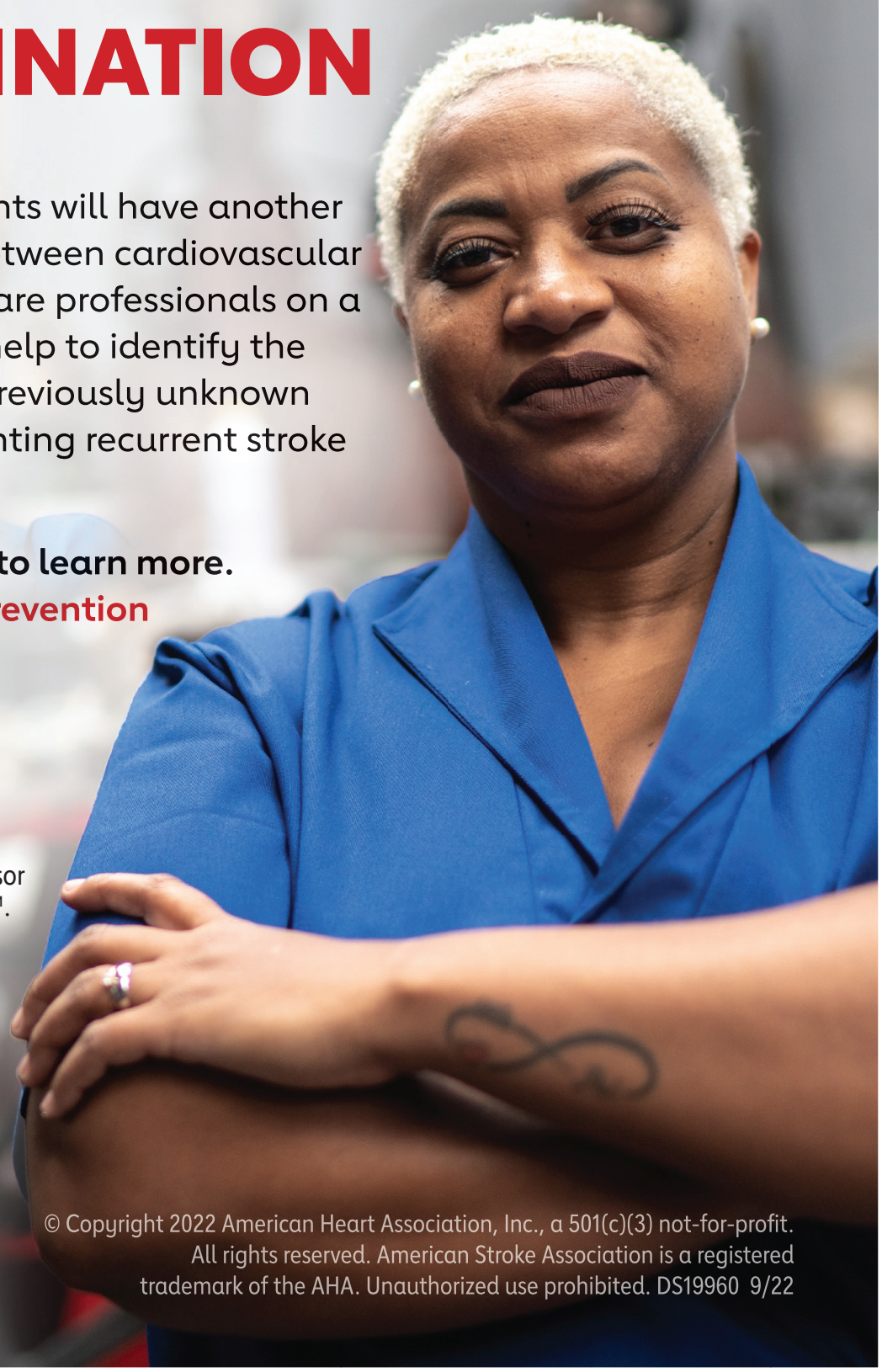

Explore a treatment option for NYHA Class II–III obstructive HCM

Learn more at BMS Booth 800

The FDA has approved a treatment option for appropriate patients with symptomatic NYHA Class II–III obstructive HCM. Visit BMS Booth 800 to learn about the MOA, examine the endpoints, and read about the safety profile of this treatment option.

FDA=US Food and Drug Administration; HCM=hypertrophic cardiomyopathy; MOA=mechanism of action; NYHA=New York Heart Association.

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